



香港浸會大學  
HONG KONG BAPTIST UNIVERSITY

## Centre for Mathematical Imaging and Vision

### Distinguished CMIV Lecture on Multidimensional Systems

# *Multidimensional Systems and Signal Processing: Good Theory for Good Practice*



## Professor Nirmal K. Bose

*HRB-Systems Professor of Electrical Engineering  
The Pennsylvania State University*

*IEEE Fellow*

*IEEE Third Millennium Merit Medal*

*IEEE CAS Education Award*

**Date: Thursday, 20 December 2007**

**Time: 11:00 am** (Preceded by Tea Reception at 10:30am)

**Venue: RRS905, Sir Run Run Shaw Building,  
Ho Sin Hang Campus, Hong Kong Baptist University**

### Abstract

The subject of multidimensional systems, as originally conceived, is concerned with a mathematical framework for tackling a broad range of paradigms whose analysis or synthesis require the use of functions and polynomials in either several complex or real variables. Its applications, which may range from the processing of spatial and temporal signals of diverse physical origin to the design of linear continuous-discrete multidimensional control systems, are already plentiful. This paper aims to promote interaction between a broad spectrum of scientists and engineers through clear exposition and interpretation of fundamentals, albeit a daunting task, so that complex theoretical results become useful to practitioners in distinct but related disciplines. The expanding arena of theory and applications of the original aims and scopes attest to the importance and vitality of the subject-matter.

✧ ✧ ✧ All are welcome ✧ ✧ ✧

For enquires please contact Ms. Claudia Chui, 3411 2348.  
<http://www.math.hkbu.edu.hk/cmiv>